ASX: VMM MARKET ANNOUNCEMENT

Confirmation of Kaolin – Halloysite at Smoky Project

ASX Release: 20 March 2023

Highlights

- Laboratory analysis of selected surface samples from the Smoky Project confirms presence of high grade Halloysite-bearing Kaolinite at the Smoky Project
- Grab surface rock sample VK-094 contains **36.6%** halloysite in the raw material.
- Findings represent the first confirmation of halloysite at the site, since the historical quarry activity in the 1980's
- Samples from the recently completed aircore drilling program at the Smoky Project have been sent to the James Hutton institute for formal assaying

Viridis Mining and Minerals Limited (**ASX: VMM**) ("**Viridis**" or the "**Company**") is pleased to provide an update to the market on surface sample assays collected from the Smoky Project site visit in December 2022 *(see ASX announcement 25 January 2023)*.

An initial batch of four surface samples were sent to the James Hutton Institute in Scotland, a well-respected and globally recognised institution offering high-quality mineral analysis for kaolinite and halloysite identification and qualification *(see ASX announcement 25 January 2023)*. The current testing was on selected samples collected along strike of the Koogah Formation from the historical halloysite quarry area.

Sample	Easting	Northing	Halloysite	Mullite	Cristobalite	Quartz	Allaphane	Rutile
VK-091	302940	6473663	2.3	57.9	31.8	2.8	0.0	1.4
VK-092	302939	6473663	**9.8**	54.3	30.5	2.3	0.0	1.2
VK-093	303393	6473972	0.0	48.5	31.1	0.3	18.0	1.7
VK-094	302743	6473642	**36.6**	0.4	3.1	55.4	0.4	0.2

Table 1. Major mineral compositions based on XRD of the bulk sample material. Minor K-feldspar, Corundum, Gibbsite was also observed in some samples.

The mineral composition was determined on the complete rock sample by XRD without any separation into different grain size fractions. The sampling confirms that the halloysite is now associated with the lower temperature section of the thermally altered section. The higher temperature portions contain Cristobalite, the high temperature silica polymorph of quartz and mullite, an aluminium silicate mineral formed by high temperature alteration of kaolinite clays. Sample VK-093 contained an amorphous phase, best fitted by allophane, a poorly crystalline hydrous aluminium silicate clay mineraloid. All these minerals reflect the original kaolin claystone source rock following various thermal and hydrous alterations.

The mineral associations seen in the sampling give confidence, as they match that reported in the published mineralised model for the target Koogah Formation. This is the first confirmation of halloysite at the site since the historical quarry activity in 1980's.

Following the site visit, the Company completed an aircore drilling campaign at the Smoky Project to test the depth, strike and mineralogy of reported and potential kaolin occurrences *(see ASX announcement 13 March 2023).* Drill material has also been sent to the James Hutton Institute in Scotland for rapid formal assays, and following the receipt of results, the Company will consider further exploration at the Project.

Commenting on the surface sampling results, VMM's Executive Chairman Mr Agha Shahzad Pervez said: *"We are extremely pleased to report the confirmation of high grade halloysite at the project and look forward to further updating the market on the results from our recently completed aircore drill campaign at Smoky*."

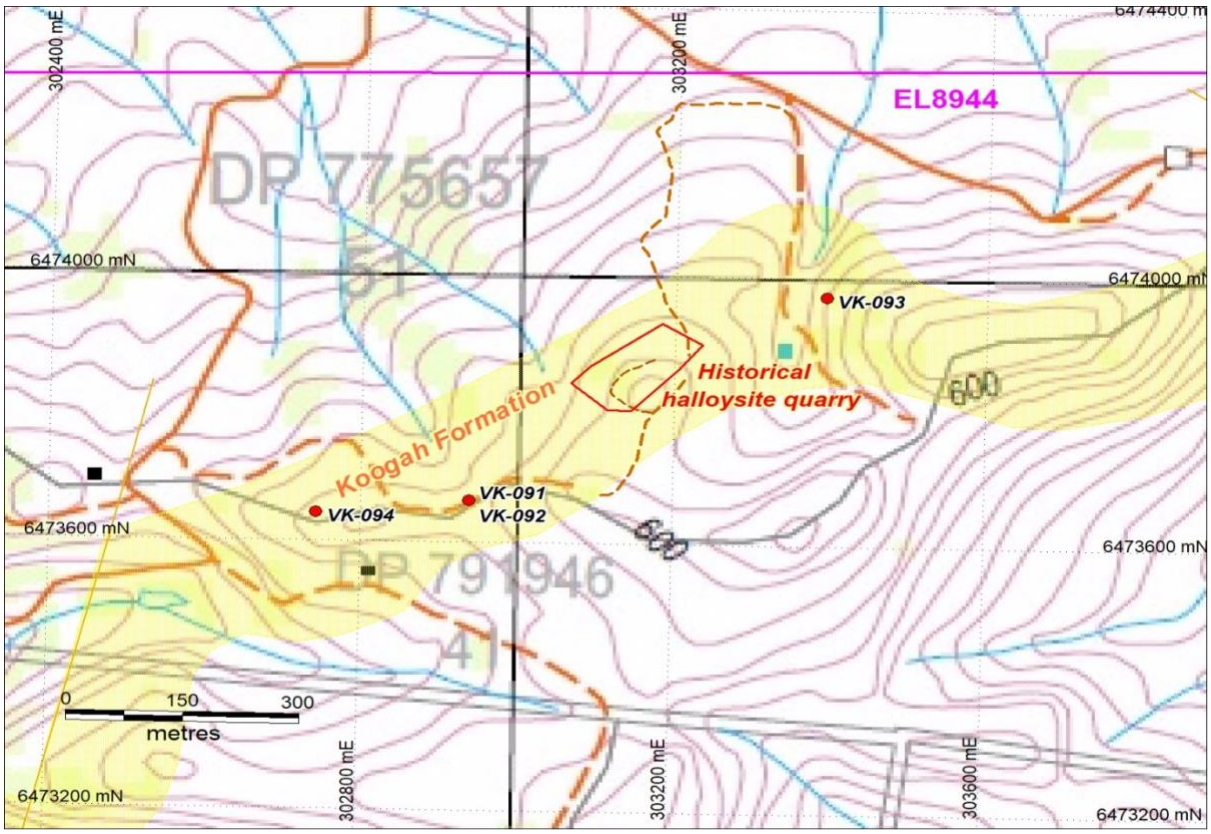

Figure 1. Surface samples collected from the Koogah Formation

Figure 2 Sample VK-094 with 36.6% halloysite content

Figure 3. Smoky Project Area aerial view, photograph looking to the southwest

Figure 4. Management site visit to the Smoky Project

The Smoky Project

The Smoky Project comprises a single exploration license (EL8944), which covers 6km2 in the upper Hunter Valley region of New South Wales. The exploration license contains a historic halloysite quarry, and covers potentially more than 3km strike length of a known and unique kaolin-halloysite bearing sequence.

Limited modern exploration has previously occurred at the Smoky Project. In 1970, Commercial Minerals Pty Ltd. identified halloysite in four trenches. During 1983-1984, historic records have shown two (2) drill holes were completed within the EL8944 area. One of these drill holes was logged to contain kaolinite clayrock from surface to 23m (end of hole), while the other was logged to contain halloysite from 11m to 14.5m, with metakaolin identified from 21m to 26.5m and kaolinite identified from 27m to 43m (end of hole) (*See prospectus dated 20, January 2022, page 34, Independent Geologist Report, page 59*).

This announcement has been authorised for release by the Board.

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About Viridis Mining and Minerals

Viridis Mining and Minerals Limited is a resource exploration and development company with assets in Canada and Australia. The Company's Projects comprise of:

- the South Kitikmeot Project, which the Company considers to be prospective for gold;
- the Boddington West Project, which the Company considers to be prospective for gold;
- the Bindoon Project, which the Company considers to be prospective for nickel, copper and platinum group elements; and
- the Poochera and Smoky Projects, which the Company considers to be prospective for kaolin-halloysite.

Competent Persons Statements

The information in this document that relates to the Smoky and Poochera projects has been prepared with information compiled by Steven Cooper, FAusIMM. Mr Steven Cooper is the principle of Orogenic Exploration Pty Ltd appointed by the Company. Mr Steven Cooper has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Steven Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially

different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward looking information.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Four surface rock chip samples were collected from EL8944 and submitted for X-ray diffraction mineral identification (XRD). • Sampling was designed to quantitatively identify minerals present in the various horizons within the thermally altered target Koogah Formation. .
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling was involved with sample collection.. .
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• All efforts were made to ensure the sample was representative at the site.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• All samples were geologically examined to include details such as colour, grain size, rock type etc which is naturally qualitative in nature. • All samples have pXRF measurements taken to support the mineralogical measurements.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All samples were photographed. .
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• All rock chip samples were collected into plastic bags and then sub-sampled by visual selection for analyses. • Sample sizes are appropriate to the clay grain size of the material being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Four selected rock chip samples were submitted to the James Hutton Institute in Aberdeen, Scotland. The James Hutton Institute measured by advanced XRD methods the halloysite and other mineral content of the rock samples. All results are based on the bulk entire fraction. • Bulk quantitative analysis samples are wet ground for 12 minutes (in ethanol or water) in a McCrone mill and spray dried to produce random powder specimens. X-ray powder diffraction (XRPD) patterns are typically recorded over a range of 65°2θ or more using either Cu or Co radiation, the actual range being instrument dependent is given on the scans. Quantitative analysis is made by a normalised full pattern reference intensity ratio (RIR) method (Omotoso et al., (2006) and Butler & Hillier (2021). Unless stated otherwise, expanded uncertainty using a coverage factor of 2, i.e. 95% confidence, is given by ±X^0.35, where X = concentration in wt.%., e.g. 30 wt.% ±3.3 • Two samples VK-091 and VK-092 were collected very close (metre apart) within the same stratigraphic and metamorphic level and can be considered to be approximate blind field duplicates. Reported laboratory major compositional proportions were within acceptable ranges considering not identical beds.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• There was no drilling involved. • Data is exploratory in nature and is compiled into in-house relational database. Original laboratory supplied pdf reports will be retained.

Criteria	JORC Code explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The location of sample sites was undertaken using a hand-held Garmin multi-band GPS in averaging mode which has an accuracy of +/- 2m using UTM WSG94 Zone 53S. • The quality and adequacy are appropriate for this level of exploration.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The sample locations were defined by access, outcrop availability and geological parameters. • Data spacing and distribution are **not** sufficient to establish the degree of geological and grade continuity or for resource reporting. The data spacing and location only provides guide for future drill planning. .
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• It is believed no bias has been introduced due to sampling methodology.
Sample security	• *The measures taken to ensure sample security.*	• All samples have been in the custody of VMM geological consultant since collection and stored in a secured private property in Smithfield with no access from the public. • Rock samples were photographed and both the remaining rock chips and photographs are stored securely. • Any residual sample material will be recovered and stored securely
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None undertaken at this early stage.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests,*	• Sampling was completed within Exploration Licence 8944, held 100% by Dig Ore Pty Ltd (a wholly owned subsidiary of VMM).

Criteria	JORC Code explanation	Commentary
land tenure status	*historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The tenement is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Mining of chamotte (mullite) commenced in 1966 under private mining agreement in the area by Steetley Industries/Commercial Minerals Limited resulting in a number of small quarries located along the Koogah Formation.. • Relevant previous exploration has been undertaken by Steetley Industries/Commercial Minerals Limited under EL1440 between 1981 and 1987 and included limited drilling along strike. • An unknown but small amount of halloysite was mined as an industrial raw material by Commercial Minerals from the 'Halloysite Quarry' during the chamotte operation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The tenement is over the Permian Koogah Formation in the upper Hunter Valley on the western limb of the Pages River Anticline. • The Koogan Formation within EL8944 consists mostly of transported alluvial fan of silt to conglomerate sized clasts of kaolinite set in a matrix of kaolinite. • A coal seam near the top of the Koogah Formation has been naturally burnt underground (it is still alight at Burning Mountain) and the thermal metamorphism has altered the kaolinite clayrocks mainly above to include mullite and cristobalite. Below the brunt seam the kaolinite clayrocks has converted mainly to metakaolin and then rehydroxylated by groundwater to hydrated halloysite. • VMM is exploring for the resulting halloysite deposits.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from*
		• No drilling was involved with the sampling.
		• See main body of report for detailed sample information,
		.

Criteria	JORC Code explanation	Commentary
	the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No aggregated results are presented.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Within EL8944 the sampled Koogah Formation has a strike generally east-northeast and dips 20° to 30° towards the northwest. • Samples were spot grab samples and do not represent measured sampling lengths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See main body of report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All other relevant data has been reported. • The reporting is considered to be balanced. • Where data has been excluded, it is not considered material.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The target areas have been the subject of previous mullite exploration and limited halloysite mining. • The sample selection was not systematic. • All relevant exploration data has been included in this report
Furter work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further exploration by drilling is required.